

When considering the usage of such a control transmitter, it is important that the would-be licensee understand exactly the implications and dangers associated with such a usage. However, when large paging systems are involved and no two-way operations exist in that area, it has been our experience that valuable and sensible usage can be made of the mobile channel to fulfill the control function. Because of the restrictions, licensees do not adopt this procedure as a first choice. In many areas, all dedicated control channels have already been completely allocated. The discussions during the flexible usage proceeding recognized that channels previously used for two-way communications are now often supporting paging operations exclusively. This is a fact and it is also reasonable when the advent of cellular systems is considered.

During the flexible usage proceeding, other commentators proposed rules which incorporated protection criteria associated with contour definition of the mobile frequency fixed station operation. These rules became loosely referred to as "Telocator showings". These showings were not intended to apply to control transmitters (particularly those to operate under Paragraph 22.518 of the existing Rules). However, custom and practice showed that this usage was adopted by the Commission for a time. The prevailing power levels possible to meet this showing were extremely low, in fact they were unusably low for most practical functions. This is acknowledged by the NPRM in the discussion of this issue.

It is our position that quantitative criteria should not be introduced at Paragraph 22.567(b). We believe that the condition referred to in the discussion of this rule at Page 13 of the NPRM (allowing the usage of the mobile channel for fixed and base operations "...subject to the condition that such use does not interfere with existing systems only") is entirely reasonable and we whole-heartedly support it. We also accept that it is reasonable that the Commission be able to suspend operations if interference were experienced. We also support the implicit notion that stations authorized according to this rule should be major actions so that notification to interested system operators occurs by means of the Public Notice procedure. Finally, we emphasize that we believe that protection should be given to existing stations only because pragmatic considerations dictate that once a system is operational (which may be supporting many tens of thousands of pagers) it is impractical to discontinue that operation after a number of years if a new two-way operation is proposed in close proximity to the larger system. It would be beneficial to stipulate a period of 12-months (similar to the period of many existing developmental authorizations) for the identification of interference problems to pre-existing two-way operations.

Whereas our comments are generated particularly by our interest in the use of the mobile channel for control transmitter operations, we see no reason why the same considerations should not apply to base transmitter usage of those frequencies.

We think that it would be advisable if the Commission incorporated a maximum ERP figure for stations operated in accordance with this Rule. Various power levels could be advocated depending upon points of view but we would suggest that the limit be 150 Watts ERP which is equivalent to the existing limit for

control stations in these bands. Our experience and that of our clients leads us to believe that this level is adequate for control operations and has not resulted in significant interference problems particularly when conservative usage methods are employed. A higher limit might create a preference for control facilities on these frequencies which we believe to be undesirable.

§ 22.575 Use of Mobile Channel for Control Transmitter

The issues involved in the retention of this Rule are intertwined with those concerning our previous comments on 22.567(b). The Commission requests comment on the continued need for this Rule (which replaces existing Rule 22.518). As is already evident, we support the use of mobile frequency control transmitters subject to restrictions which have already been described. If our suggestions for Paragraph 22.567(b) are adopted, then this Rule is no longer required. However, if the usage of mobile frequencies is only determined to be permissible for the control stations, then those stipulations might be better placed under this Rule rather than under the proposed Rule 22.567(b).

§ 22.589 One-way or Two-way Application Requirements

Our previous comments concerning the need for exhibits describing interference potential to include co-channel radial data apply equally to this Rule.

§ 22.591 Channels for Point-to-Point Operation

We would suggest that this Rule include a clarification that the 72-76 MHz channels may be used for point-to-multipoint operation as well as point-to-point operation.

§ 22.599 Assignment of 72-76 MHz Channels

In Subpart (b) of this Rule, which deals with the classification of authorizations subject to distance parameters from TV Channels 4 or 5 transmitters, it is indicated that "...within 50 metres.." of a TV transmitter, authorizations may be made on a regular rather than a developmental authorization. We support the introduction of a qualification as it has become accepted practice to locate these controls adjacent to TV transmitters to ensure that interference does not occur because the wanted TV channel produces a signal which is much greater than the lower power control channel when measured at TV receiver input terminals. We question the derivation of the 50-metre stipulated distance as this is somewhat restrictive. We believe that this distance could be increased without any significant likelihood of interference, particularly when it is remembered that a licensee implicitly agrees to eliminate any interference when proposing any usage within 129 kilometres of such a TV station.

New Form 401

Various changes need to be incorporated in the instructions for the modified Form 401. Instructions numbered 15, 16, 18 and 19 cross refer to entry numbers on the Form 401 which are no longer correct as they pertain to the current Form 401. Similarly, the instruction concerning Exhibit F refers to Rule Section 22.15(b) which is a reference to the existing Rules.

Although we have no objection to it, we would highlight the fact that instruction 3 specifies that dates be of the format "ddmmyy". This seems to be inconsistent with common procedure and may result in unwitting inaccuracies on the forms. We would suggest that the more conventional mmddyy configuration be adopted.

We take exception to instruction 15 for Form 401 which states that "If the antenna in Item 34 [sic] is omnidirectional and is mounted on the side of a supporting structure, check to see that the antenna pattern (polar diagram) remains omnidirectional". This instruction does not convey any specific meaning to us as readers and is therefore totally confusing. We also take exception to the underlying suggestion that an omnidirectional antenna maintains the same characteristics whether it be side-mounted or top-mounted on a structure. Our assertion, which has been supported in various FCC proceedings, is not only associated with the overall shape of the antenna radiation pattern but also the peak gain of that pattern which directly affects the calculation of maximum allowable ERP. We advocate that instruction 15 be rewritten to state that "Radiation patterns are required for all side-mounted antennas". If the radiation pattern of the antenna

is unaffected by the tower then it must inherently be a directional antenna for which a polar diagram is already required, and if it is not a directional antenna, then its pattern is modified by the structure on which it is mounted and therefore a pattern should be required. We reiterate our comments concerning proposed rule 22.115; if changes in mounting can affect the radiation pattern of an antenna and, as a consequence, its peak gain, then the correct method must be specified in enough detail to ensure accurate installation.

We are confused by some of the Schedule B requirements relating to repeated requests for coordinates which seem to be duplications. This comment refers to Questions 19, 27, 34 and 37. It should be noted that 27 is used twice on the form.

The proposed Form 401 Schedule B requires radial data for transmitted power only. The rationale is that, given the coordinates and ground elevation (which are specified elsewhere on the Form), terrain data can be derived using available terrain data bases. While we accept the validity of this argument, we believe that it imposes a significant burden on applicants who wish subsequently to demonstrate interference-free operation to these stations if they have to derive this data on each occasion when it is required. We believe it is preferable to include, at a minimum, data relating to height above average terrain for each radial and it is to be preferred that this be supplemented by calculated distances to contour. While we may accept that different terrain data bases (having resolutions such as 3 seconds and 30 seconds) may be acceptable for usage, it is inescapable that different results are produced by these data bases. In a proceeding where the Commission is replacing curves with formulae to ensure that contour distances are calculated with consistency, it is inconsistent to allow

different entities to use different terrain data as the basis for subsequent calculations. We suggest that the Commission's data base, which is predicated on Form 401 content, include an absolute definition of the contour distances authorized.

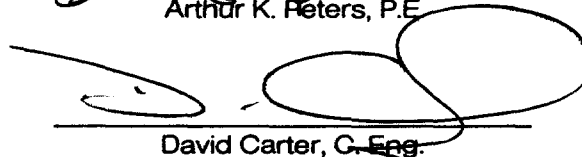
Finally, the reformatted Form 401 contains many differences from the existing Form 401. In the interest of consistency we believe it is necessary that each entry have a precise instruction associated with it. Inherently, this will result in longer instructions but we believe this to be preferable to the different of entry methods which will otherwise result.

Adoption of the Metric System

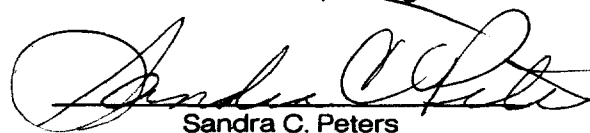
We are pleased to support the usage of an international, common system of units. We respectfully advocate the usage of the international, common spelling associated with that system. The metric (not meteric) system is based on the metre (not meter). At a time when we adopt a common standard, we should also embrace its vocabulary rather than promulgate a parochial alternative.



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